

Abstract Submitted
for the APR12 Meeting of
The American Physical Society

The Cosmic Ray Observatory Project: A Statewide Outreach and Education Experiment in Nebraska DANIEL CLAES, GREGORY SNOW, University of Nebraska-Lincoln — For the past 10 years, the University of Nebraska-Lincoln (UNL) Department of Physics and Astronomy has led the Cosmic Ray Observatory Project (CROP), a statewide education and research experiment involving Nebraska high school students, teachers, and university undergraduates in the study of extensive cosmic-ray air showers. With generous funding from the National Science Foundation in the first 7 years, a growing network of high school teams construct, install, and operate school-based detectors in coordination with UNL physics professors and graduate students. The detector system at each school is an array of scintillation counters recycled from the Chicago Air Shower Array in weather-proof enclosures on the school roof, with a GPS receiver providing a time stamp for cosmic-ray events. The detectors are connected to triggering electronics and a data-acquisition PC inside the building. Students share data via the Internet to search for time coincidences with other sites. The presentation will highlight the scientific and professional development achievements of the project to date, lessons learned since its inception, and plans for continued expansion to the 314 high schools in the state.

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Date submitted: 06 Jan 2012

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